

Application No.: 10/024,908

Docket No.: SUND 3.0-127

IN THE SPECIFICATION

14. After a wire has been passed around the bale as described, the bale is moved a certain distance forward by the bale conveyor 15, 16 to receive another lap of wire. The feed pulley 20 again begins feeding the wire end, and at first wire is taken from the slack loop 33 left by the preceding reverse feed operation and the feed pulley 20 quickly attains the full feed rate which may be e.g. 4.5 m/s. When the slack runs out and the slack loop reaches the three change-of-direction pulleys, 25-27, mounted on the block 30, the wire will begin to be drawn from the change-of-direction pulley 23 and the stationary wire will begin to accelerate up to the feed rate. The jerk that occurs when the slack loop of wire reaches the change-of-direction pulleys, 25-27, will compress the spring 31, thus damping the jerk in the stationary portion of the wire so that it can accelerate smoothly. The spring should not be pre-stressed and its progressivity should be such that there is time for the force exerted by the wire to brake the return motion of the block so that the block does not stop abruptly in its normal position, as this could cause a risk of kinking and tangling of the wire, even though the motion of the block 3031 when the slack loop 33 of wire reaches the three change-of-direction pulleys, 25-27, reduces the risk thereof. The spring-loaded block 3031 achieves a considerable reduction in the risk of kinking and tangling of the wire and simultaneously reduces the stress on the feed pulley 20 and on its motor and gearbox if any, which may result in increased lifetime of these parts. Application of the invention permits the use of a very high wire feed rate.